### PATENT ABSTRACTS OF JAPAN

(11)Publication number:

07-162361

(43)Date of publication of application: 23.06.1995

(51)Int.CI.

H04B 7/26

H04B 7/005

(21)Application number: 05-340975

(71)Applicant: JAPAN RADIO CO LTD

(22)Date of filing:

10.12.1993

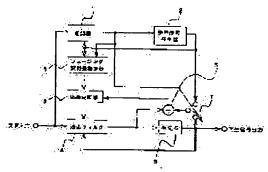
(72)Inventor: YUGAWA TAKAHIRO

### (54) ADAPTIVE EQUALIZER

### (57)Abstract:

PURPOSE: To prevent an equalizing characteristic from being deteriorated and to obtain an effective characteristic by changing the follow-up characteristic of an adaptive filter in accordance with fading variation estimated from an output of a known signal detecting correlator.

CONSTITUTION: A signal obtained by periodically inserting a known signal into a transmitting signal is inputted to a correlator 1 and the adaptive filter 4 and the correlator 1 executes correlation operation between the same reference signal as the known signal and the received input signal, an error detecting part 5 obtains an error between a correlation result and an output from the filter 4 which is obtained by processing the received input signal and a coefficient updating part 3 updates the coefficient of the filter 4 in accordance with the error. A fading variation estimater 8 estimates fading variation generated due to variation in the moving speed of a mobile object by the output of the correlator 1 without



requiring external information and the updating part 3 changes follow-up algorithm to a value matched with the variation based upon the estimated variation and executes coefficient updating operation.

#### **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

EST AVAILABLE COPY

Copyright (C); 1998,2003 Japan Patent Office

# (12) 公開特許公報(A)

(11)特許出願公開番号

## 特開平7-162361

(43)公開日 平成7年(1995)6月23日

(51) Int.Cl. <sup>6</sup> H 0 4 B	7/26 7/005	識別記号	庁内整理番号	FΙ		技術表示箇所
			4229-5K 7605-5K	· H04B 7/26	6 C	
				·	· ·	

審査請求 未請求 請求項の数3 FD (全 4 頁)

(21)出願番号	特願平5-340975	(71)出顧人	000004330

日本無線株式会社 (22)出願日 平成5年(1993)12月10日 東京都三慶市下油水

東京都三鷹市下連省5丁目1番1号

(72)発明者 湯川 隆広

東京都三鷹市下連省5丁目1番1号 日本

無線株式会社内

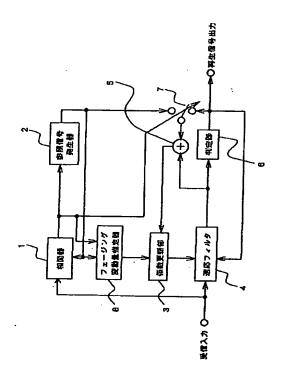
(74)代理人 弁理士 高橋 友二 (外1名)

### (54) 【発明の名称】 適応等化器

### (57)【要約】

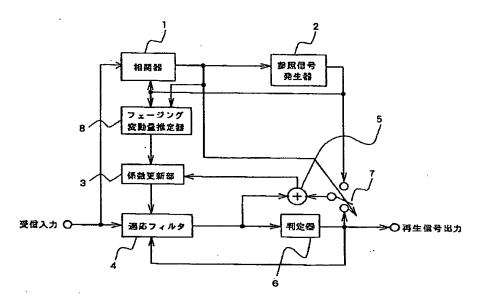
【目的】 従来のこの種の適応等化器においては、移動体の移動速度の変動によるフェージング変動量を常に最大の変動量があるとして追従特性を設定しているため、受信特性が劣化する。これを改善する。

【構成】 移動速度の変動により生じるフェージング変動量を外部からの情報を必要とすることなく推定するフェージング変動量推定手段を付加し、この出力をパラメータとして適応フィルタの追従特性を変化させることとした。

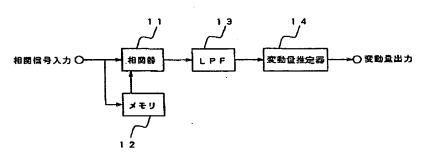


BEST AVAILABLE COPY

【図1】



【図3】



[図4]

